

REAL NUMBERS

Go for 2 Marks to write 10 – Get 20

Finding HCF by Euclid's division algorithm

1. Find the HCF of 65 and 117 by Euclid's division algorithm
2. Find the HCF of 55 and 210 by Euclid's division algorithm
3. Find the HCF of 237 and 81 by Euclid's division algorithm
4. Find the largest number that divides 455 and 42 with the help of division algorithm
5. There are 75 roses and 45 lily flowers. These are to be made into bouquets containing both the flowers. All the bouquets should contain the same number of flowers. Find the number of bouquets with maximum number of flowers that can be formed and the number of flowers in them.
6. The length and breadth of a rectangle field is 110m and 30m respectively. Calculate the length of the longest rod which can be measure the length and breadth of the field exactly.

Writing the given number into product of prime factor

7. Express 120 as a product of prime factor
8. Express 3825 as a product of prime factor
9. Express 6762 as a product of prime factor
10. Express 240 as a product of prime factor
11. Express 720 as a product of prime factor

Finding HCF and LCM by product of prime factors

12. Find HCF and LCM of 12 and 15 by expressing them as a product of primes
13. Find HCF and LCM of 18 and 81 by expressing them as a product of primes
14. Find HCF and LCM of 18 , 81 and 108 by expressing them as a product of primes

Finding HCF and LCM by using the formula $HCF(a, b) \times LCM(a, b) = a \times b$

15. If HCF of 52 and 182 is 26. Find LCM
16. Find the HCF of 105 and 1515 by prime factor method and hence find it's LCM

Proving given number is irrational number

17. Prove that $\sqrt{2}$ is a irrational number
18. Prove that $\sqrt{3}$ is a irrational number
19. Prove that $\sqrt{7}$ is a irrational number
20. Prove that $2\sqrt{5}$ is a irrational number
21. Prove that $\frac{\sqrt{7}}{2}$ is a irrational number
22. Prove that $3 + \sqrt{5}$ is a irrational number
23. Prove that $5 - \sqrt{2}$ is a irrational number
24. Prove that $2 + 7\sqrt{2}$ is a irrational number
25. Prove that $2\sqrt{3} - 5$ is a irrational number
26. Prove that $\sqrt{2} + \sqrt{3}$ is a irrational number
27. Prove that $2\sqrt{2} + 3\sqrt{3}$ is a irrational number
28. Prove that $2\sqrt{2} - 3\sqrt{3}$ is a irrational number